



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 52 and 81

[EPA-R03-OAR-2014-0789; FRL-9922-52-Region 3]

Approval and Promulgation of Air Quality Implementation Plans; Pennsylvania; Redesignation of the Allentown Nonattainment Area to Attainment for the 2006 24-Hour Fine Particulate Matter Standard

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve the Commonwealth of Pennsylvania's request to redesignate to attainment the Allentown nonattainment area (Allentown Area or Area) for the 2006 24-hour fine particulate matter (PM_{2.5}) national ambient air quality standard (NAAQS). EPA is also proposing to determine that the Allentown Area continues to attain the 2006 24-hour PM_{2.5} NAAQS. In addition, EPA is proposing to approve as a revision to the Pennsylvania State Implementation Plan (SIP) the associated maintenance plan to show maintenance of the 2006 24-hour PM_{2.5} NAAQS through 2025 for the Area. The maintenance plan includes the 2017 and 2025 PM_{2.5} and nitrogen oxides (NO_x) mobile vehicle emissions budgets (MVEBs) for the Area for the 2006 24-hour PM_{2.5} NAAQS, which EPA is proposing to approve for transportation conformity purposes. Finally, EPA is proposing to approve as a revision to the Pennsylvania SIP the 2007 base year emissions inventory for the Area for the 2006 24-hour PM_{2.5} NAAQS. This rulemaking action to propose approval of the 2006 24-hour PM_{2.5} NAAQS redesignation request and associated maintenance plan for the Allentown Area is based on EPA's determination that Pennsylvania has met the criteria for redesignation to attainment specified in the Clean Air Act (CAA) for the 2006 24-hour PM_{2.5} NAAQS.

DATES: Written comments must be received on or before **[insert date 30 days from date of publication]**.

ADDRESSES: Submit your comments, identified by Docket ID Number EPA-R03-OAR-2014-0789 by one of the following methods:

- A. www.regulations.gov. Follow the on-line instructions for submitting comments.
- B. E-mail: powers.marilyn@epa.gov.
- C. Mail: EPA-R03-OAR-2014-0789 Marilyn Powers, Acting Associate Director, Office of Air Program Planning, Mailcode 3AP30, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103.
- D. Hand Delivery: At the previously-listed EPA Region III address. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID No. EPA-R03-OAR-2014-0789. EPA's policy is that all comments received will be included in the public docket without change, and may be made available online at www.regulations.gov, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through www.regulations.gov or e-mail. The www.regulations.gov website is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your

comment. If you send an e-mail comment directly to EPA without going through www.regulations.gov, your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

Docket: All documents in the electronic docket are listed in the www.regulations.gov index. Although listed in the index, some information is not publicly available, i.e., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in www.regulations.gov or in hard copy during normal business hours at the Air Protection Division, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103. Copies of the State submittal are available at the Pennsylvania Department of Environmental Protection, Bureau of Air Quality Control, P.O. Box 8468, 400 Market Street, Harrisburg, Pennsylvania 17105.

FOR FURTHER INFORMATION CONTACT: Rose Quinto, (215) 814-2182, or by e-mail at quinto.rose@epa.gov.

TABLE OF CONTENTS

I. Background

II. EPA's Requirements

A. Criteria for Redesignation to Attainment

B. Requirements of a Maintenance Plan

III. Summary of Proposed Actions

IV. Effects of Recent Court Decisions on Proposed Actions

A. Effects of the August 21, 2012 D.C. Circuit Court Decision Regarding EPA's CSAPR

B. Effect of the January 4, 2013 D.C. Circuit Court Decision Regarding the PM_{2.5}

Implementation under Subpart 4 of Part D of Title I of the CAA

V. EPA's Analysis of Pennsylvania's SIP Submittal

A. Redesignation Request

B. Maintenance Plan

C. Transportation Conformity

VI. Proposed Actions

VII. Statutory and Executive Order Reviews

I. Background

The first air quality standards for PM_{2.5} were established on July 18, 1997 (62 FR 38652). EPA promulgated an annual standard at a level of 15 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), based on a three-year average of annual mean PM_{2.5} concentrations (the 1997 annual PM_{2.5} NAAQS). In the same rulemaking action, EPA promulgated a 24-hour standard of 65 $\mu\text{g}/\text{m}^3$, based on a three-

year average of the 98th percentile of 24-hour concentrations.

On October 17, 2006 (71 FR 61144), EPA retained the annual average standard at 15 µg/m³, but revised the 24-hour standard to 35 µg/m³ based on the three-year average of the 98th percentile of the 24-hour concentrations (the 2006 24-hour PM_{2.5} NAAQS). On November 13, 2009 (74 FR 58688), EPA published designations for the 2006 24-hour PM_{2.5} NAAQS, which became effective on December 14, 2009. In that rulemaking action, EPA designated the Allentown Area as nonattainment for the 2006 24-hour PM_{2.5} NAAQS. The Allentown Area is comprised of Lehigh and Northampton Counties. *See* 40 CFR 81.339.

On March 29, 2012 (77 FR 18922), EPA determined that the Allentown Area had clean data and monitored attainment for the 2006 24-hour PM_{2.5} NAAQS. Pursuant to 40 CFR 51.1004(c) and based on this determination, the requirements for the Area to submit an attainment demonstration and associated reasonably available control measures (RACM), reasonable further progress (RFP) plan, contingency measures, and other planning SIP revisions related to the attainment of the 2006 24-hour PM_{2.5} NAAQS are suspended until such time as: the Area is redesignated to attainment for the standard, at which time the section 51.1004(c) requirements no longer apply; or EPA determines that the Area has again violated the standard, at which time such plans are required to be submitted. EPA's review of the most recent certified monitoring data for the Area shows that the Area continues to attain the 2006 24-hour PM_{2.5} NAAQS.

On September 5, 2014, the Commonwealth of Pennsylvania, through the Pennsylvania

Department of Environmental Protection (PADEP), formally submitted a request to redesignate the Allentown Area from nonattainment to attainment for the 2006 24-hour PM_{2.5} NAAQS.

Concurrently, PADEP submitted a maintenance plan for the Area as a SIP revision to ensure continued attainment throughout the Area over the next 10 years. The maintenance plan includes the 2017 and 2025 PM_{2.5} and NO_x MVEBs for the Area for the 2006 24-hour PM_{2.5} NAAQS.

PADEP also submitted a 2007 comprehensive emissions inventory for the Area for the 2006 24-hour PM_{2.5} NAAQS for PM_{2.5}, NO_x, sulfur dioxide (SO₂), volatile organic compounds (VOCs), and ammonia (NH₃).

In this proposed rulemaking action, EPA addresses the effects of several decisions of the United States Court of Appeals for the District of Columbia (D.C. Circuit Court) and a decision of the United States Supreme Court: (1) The D.C. Circuit Court's August 21, 2012 decision to vacate and remand to EPA the Cross-State Air Pollution Control Rule (CSAPR); (2) the Supreme Court's April 29, 2014 reversal of the vacature of CSAPR, and remand to the D.C. Circuit Court; (3) the D.C. Circuit Court's October 23, 2014 decision to lift the stay of CSAPR; and (4) the D.C. Circuit Court's January 4, 2013 decision to remand to EPA two final rules implementing the PM_{2.5} NAAQS.

II. EPA's Requirements

A. Criteria for Redesignation to Attainment

The CAA provides the requirements for redesignating a nonattainment area to attainment.

Specifically, section 107(d)(3)(E) of the CAA allows for redesignation providing that: (1) EPA

determines that the area has attained the applicable NAAQS; (2) EPA has fully approved the applicable implementation plan for the area under section 110(k) of the CAA; (3) EPA determines that the improvement in air quality is due to permanent and enforceable reductions in emissions resulting from implementation of the applicable SIP and applicable Federal air pollutant control regulations and other permanent and enforceable reductions; (4) EPA has fully approved a maintenance plan for the area as meeting the requirements of section 175A of the CAA; and (5) the state containing such area has met all requirements applicable to the area under section 110 and part D of the CAA. Each of these requirements are discussed in Section V. of today's proposed rulemaking action.

EPA provided guidance on redesignations in the "SIPs; General Preamble for the Implementation of Title I of the CAA Amendments of 1990," (57 FR 13498, April 16, 1992) (the General Preamble) and has provided further guidance on processing redesignation requests in the following documents: (1) "Procedures for Processing Requests to Redesignate Areas to Attainment," Memorandum from John Calcagni, Director, Air Quality Management Division, September 4, 1992 (hereafter referred to as the 1992 Calcagni Memorandum); (2) "SIP Actions Submitted in Response to CAA Deadlines," Memorandum from John Calcagni, Director, Air Quality Management Division, October 28, 1992; and (3) "Part D New Source Review (Part D NSR) Requirements for Areas Requesting Redesignation to Attainment," Memorandum from Mary D. Nichols, Assistant Administrator for Air and Radiation, October 14, 1994.

B. Requirements of a Maintenance Plan

Section 175A of the CAA sets forth the elements of a maintenance plan for areas seeking redesignation from nonattainment to attainment. Under section 175A of the CAA, the plan must demonstrate continued attainment of the applicable NAAQS for at least 10 years after approval of a redesignation of an area to attainment. Eight years after the redesignation, the state must submit a revised maintenance plan demonstrating that attainment will continue to be maintained for the 10 years following the initial 10-year period. To address the possibility of future NAAQS violations, the maintenance plan must contain such contingency measures, with a schedule for implementation, as EPA deems necessary to assure prompt correction of any future PM_{2.5} violations.

The 1992 Calcagni Memorandum provides additional guidance on the content of a maintenance plan. The Memorandum states that a maintenance plan should address the following provisions: (1) An attainment emissions inventory; (2) a maintenance demonstration showing maintenance for 10 years; (3) a commitment to maintain the existing monitoring network; (4) verification of continued attainment; and (5) a contingency plan to prevent or correct future violations of the NAAQS.

Under the CAA, states are required to submit, at various times, control strategy SIP revisions and maintenance plans for nonattainment areas and for areas seeking redesignation to attainment for a given NAAQS. These emission control strategy SIP revisions (e.g., RFP and attainment demonstration SIP revisions) and maintenance plans create MVEBs based on onroad mobile source emissions for the relevant criteria pollutants and/or their precursors, where appropriate, to

address pollution from onroad transportation sources. The MVEBs are the portions of the total allowable emissions that are allocated to onroad vehicle use that, together with emissions from all other sources in the area, will provide attainment, RFP, or maintenance, as applicable. The budget serves as a ceiling on emissions from an area's planned transportation system. Under 40 CFR part 93, a MVEB for an area seeking a redesignation to attainment is established for the last year of the maintenance plan.

The maintenance plan for the Allentown Area, that comprises Lehigh and Northampton Counties in Pennsylvania, includes the 2017 and 2025 PM_{2.5} and NO_x MVEBs for transportation conformity purposes. The transportation conformity determination for the Area is further discussed in Section V.C. of today's proposed rulemaking action and in a technical support document (TSD) dated December 1, 2014, which is available in the docket for this proposed rulemaking.

III. Summary of Proposed Actions

EPA is proposing to take several rulemaking actions related to the redesignation of the Allentown Area to attainment for the 2006 24-hour PM_{2.5} NAAQS. EPA is proposing to find that the Area meets the requirements for redesignation for the 2006 24-hour PM_{2.5} NAAQS under section 107(d)(3)(E) of the CAA. EPA is thus proposing to approve Pennsylvania's request to change the legal definition for the Allentown Area from nonattainment to attainment for the 2006 24-hour PM_{2.5} NAAQS. EPA is also proposing to approve the associated maintenance plan for the Area as a revision to the Pennsylvania SIP for the 2006 24-hour PM_{2.5}

NAAQS, including the 2017 and 2025 PM_{2.5} and NO_x MVEBs for the Area for transportation conformity purposes. Approval of the maintenance plan is one of the CAA criteria for redesignation of the Area to attainment for the 2006 24-hour PM_{2.5} NAAQS. Pennsylvania's maintenance plan is designed to ensure continued attainment in the Area for at least 10 years after redesignation for the 2006 24-hour PM_{2.5} NAAQS.

EPA previously determined that the Allentown Area had clean data showing monitored attainment for the 2006 24-hour PM_{2.5} NAAQS, and EPA is proposing to find that the Allentown Area continues to attain the 2006 24-hour PM_{2.5} NAAQS. EPA is also proposing to approve the 2007 comprehensive emissions inventory submitted by PADEP that includes PM_{2.5}, SO₂, NO_x, VOC, and NH₃ for the Area as a revision to the Pennsylvania SIP for the 2006 24-hour PM_{2.5} NAAQS in order to meet the requirements of section 172(c)(3) of the CAA.

IV. Effects of Recent Court Decisions on Proposed Actions

A. Effects of the August 21, 2012 D.C. Circuit Court Decision Regarding EPA's CSAPR

1. Background

The D.C. Circuit Court and the Supreme Court have issued a number of decisions and orders regarding the status of EPA's regional trading programs for transported air pollution, the Clean Air Interstate Rule (CAIR) and CSAPR, that impact this proposed redesignation action. In 2008, the D.C. Circuit Court initially vacated CAIR, *North Carolina v. EPA*, 531 F.3d 896 (D.C. Cir. 2008), but ultimately remanded the rule to EPA without vacatur to preserve the environmental benefits provided by CAIR, *North Carolina v. EPA*, 550 F.3d 1176, 1178 (D.C. Cir. 2008). On

August 8, 2011 (76 FR 48208), acting on the D.C. Circuit Court's remand, EPA promulgated CSAPR, to address interstate transport of emissions and resulting secondary air pollutants and to replace CAIR.¹ CSAPR requires substantial reductions of SO₂ and NO_x emissions from electric generating units (EGUs) in 28 states in the Eastern United States. Implementation of CSAPR was scheduled to begin on January 1, 2012, when CSAPR's cap-and-trade programs would have superseded the CAIR cap-and-trade programs. Numerous parties filed petitions for review of CSAPR, and on December 30, 2011, the D.C. Circuit Court issued an order staying CSAPR pending resolution of the petitions and directing EPA to continue to administer CAIR. *EME Homer City Generation, L.P. v. EPA*, No. 11-1302 (D.C. Cir. Dec. 30, 2011), Order at 2.

On August 21, 2012, the D.C. Circuit Court issued its ruling, vacating and remanding CSAPR to EPA and once again ordering continued implementation of CAIR. *EME Homer City Generation, L.P. v. EPA*, 696 F.3d 7, 38 (D.C. Cir. 2012). The D.C. Circuit Court subsequently denied EPA's petition for rehearing en banc. *EME Homer City Generation, L.P. v. EPA*, No. 11-1302, 2013 WL 656247 (D.C. Cir. Jan. 24, 2013), at *1. EPA and other parties then petitioned the Supreme Court for a writ of certiorari, and the Supreme Court granted the petitions on June 24, 2013. *EPA v. EME Homer City Generation, L.P.*, 133 S. Ct. 2857 (2013).

On April 29, 2014, the Supreme Court vacated and reversed the D.C. Circuit Court's decision regarding CSAPR, and remanded that decision to the D.C. Circuit Court to resolve remaining issues in accordance with its ruling. *EPA v. EME Homer City Generation, L.P.*, 134 S. Ct. 1584 (2014). EPA moved to have the stay of CSAPR lifted in light of the Supreme Court decision.

¹ CAIR addressed the 1997 PM_{2.5} annual NAAQS and the 1997 8-hour ozone NAAQS. CSAPR addresses contributions from upwind states to downwind nonattainment and maintenance of the 2006 24-hour PM_{2.5} NAAQS as well as the ozone and PM_{2.5} NAAQS addressed by CAIR.

EME Homer City Generation, L.P. v. EPA, Case No. 11-1302, Document No. 1499505 (D.C. Cir. filed June 26, 2014). In its motion, EPA asked the D.C. Circuit Court to toll CSAPR's compliance deadlines by three years, so that the Phase 1 emissions budgets apply in 2015 and 2016 (instead of 2012 and 2013), and the Phase 2 emissions budgets apply in 2017 and beyond (instead of 2014 and beyond). On October 23, 2014, the D.C. Circuit granted EPA's motion and lifted the stay of CSAPR which was imposed on December 30, 2011. *EME Homer City Generation, L.P. v. EPA*, No. 11-1302 (D.C. Cir. Oct.23, 2014), Order at 3. EPA issued an interim final rule to clarify how EPA will implement CSAPR consistent with the D.C. Circuit Court's order granting EPA's motion requesting lifting the stay and tolling the rule's deadlines. See 79 FR 71663, December 3, 2014 (interim final rulemaking). Consistent with the rule, EPA began implementing CSAPR on January 1, 2015.

2. Proposal on This Issue

Because CAIR was promulgated in 2005 and incentivized sources and states to begin achieving early emission reductions, the air quality data examined by EPA in issuing a final determination of attainment for the Allentown Area in 2012 (March 29, 2012, 77 FR 18922) and the air quality data from the Area since 2005 necessarily reflect reductions in emissions from upwind sources as a result of CAIR, and Pennsylvania included CAIR as one of the measures that helped to bring the Area into attainment. However, modeling conducted by EPA during the CSAPR rulemaking process, which used a baseline emissions scenario that "backed out" the effects of CAIR, see 76 FR at 48223, projected that Lehigh and Northampton Counties would have a PM_{2.5} 24-hour design value below the level of the 2006 24-hour PM_{2.5} NAAQS for 2012 and 2014 without

taking into account emission reductions from CAIR or CSAPR. *See* Appendix B of EPA’s “Air Quality Modeling Final Rule Technical Support Document,” (Page B-86), which is available in the docket for this proposed rulemaking action. In addition, the 2010-2012 quality-assured, quality-controlled, and certified monitoring data for the Allentown Area confirms that the 24-hour PM_{2.5} design value for the Area remained well below the 2006 24-hour PM_{2.5} NAAQS in 2012.

The status of CSAPR is not relevant to this redesignation. CSAPR was promulgated in June 2011, and the rule was stayed by the D.C. Circuit Court just six months later, before the trading programs it created were scheduled to go into effect. Therefore, the Allentown Area’s attainment of the 2006 24-hour PM_{2.5} NAAQS cannot have been a result of any emission reductions associated with CSAPR. In addition, on October 23, 2014, the D.C. Circuit Court lifted the stay on CSAPR and EPA began implementing CSAPR on January 1, 2015. In summary, neither the status of CAIR nor the current status of CSAPR affects any of the criteria for proposed approval of this redesignation request for the Area.

B. Effect of the January 4, 2013 D.C. Circuit Court Decision Regarding PM_{2.5}

Implementation under Subpart 4 of Part D of Title I of the CAA

1. Background

On January 4, 2013, in *NRDC v. EPA*, the D.C. Circuit Court remanded to EPA the “Final Clean Air Fine Particle Implementation Rule” (72 FR 20586, April 25, 2007) and the “Implementation of the New Source Review (NSR) Program for PM_{2.5}” final rule (73 FR 28321, May 16, 2008)

(collectively, 1997 PM_{2.5} Implementation Rule). 706 F.3d 428 (D.C. Cir. 2013). The D.C. Circuit Court found that EPA erred in implementing the 1997 annual PM_{2.5} NAAQS pursuant to the general implementation provisions of subpart 1 of part D of Title I of the CAA (subpart 1), rather than the particulate-matter-specific provisions of subpart 4 of part D of Title I (subpart 4). Prior to the January 4, 2013 decision, the states had worked towards meeting the air quality goals of the 2006 PM_{2.5} NAAQS in accordance with EPA regulations and guidance derived from subpart 1 of Part D of Title I of the CAA. In response to the D.C. Circuit Court's remand, EPA took this history into account by setting a new deadline for any remaining submissions that may be required for moderate nonattainment areas as a result of the D.C. Circuit Court's decision regarding the applicability of subpart 4 of part D of Title I of the CAA.

On June 2, 2014 (79 FR 31566), EPA issued a final rule, "Identification of Nonattainment Classification and Deadlines for Submission of SIP Provisions for the 1997 and 2006 PM_{2.5} NAAQS" (the PM_{2.5} Subpart 4 Classification and Deadline Rule), which identifies the classification under subpart 4 for areas currently designated nonattainment for the 1997 annual and/or 2006 24-hour PM_{2.5} NAAQS. The rule set a deadline for states to submit attainment plans and meet other subpart 4 requirements. The rule specifies December 31, 2014 as the deadline for states to submit any additional attainment-related SIP elements that may be needed to meet the applicable requirements of subpart 4 for areas currently designated nonattainment for the 1997 PM_{2.5} and/or 2006 PM_{2.5} NAAQS and to submit SIPs addressing the nonattainment new source review (NSR) requirements in subpart 4.

As explained in detail in the following section, since Pennsylvania submitted its request to redesignate the Allentown Area on September 5, 2014, any additional attainment-related SIP elements that may be needed for the Area to meet the applicable requirements of subpart 4 were not due at the time Pennsylvania submitted its request to redesignate the Allentown Area for the 2006 24-hour PM_{2.5} NAAQS.

2. Proposal on This Issue

In this proposed rulemaking action, EPA addresses the effect of the D.C. Circuit Court's January 4, 2013 ruling and the June 2, 2014 PM_{2.5} Subpart 4 Classification and Deadline Rule on the Area's redesignation request. EPA is proposing to determine that the D.C. Circuit Court's January 4, 2013 decision does not prevent EPA from redesignating the Area to attainment for the 2006 24-hour PM_{2.5} NAAQS. Even in light of the D.C. Circuit Court's decision, redesignation for this Area is appropriate under the CAA and EPA's longstanding interpretations of the CAA's provisions regarding redesignation. EPA first explains its longstanding interpretation that requirements that are imposed, or that become due, after a complete redesignation request is submitted for an area that is attaining the standard, are not applicable for purposes of evaluating a redesignation request. Second, EPA then shows that, even if EPA applies the subpart 4 requirements to the redesignation request of the Area and disregards the provisions of its 1997 PM_{2.5} Implementation Rule recently remanded by the D.C. Circuit Court, Pennsylvania's request for redesignation of the Area still qualifies for approval. EPA's discussion takes into account the effect of the D.C. Circuit Court's ruling and the June 2, 2014 PM_{2.5} Subpart 4 Classification and

Deadline Rule on the maintenance plan of the Area, which EPA views as approvable when subpart 4 requirements are considered.

a. Applicable Requirements under Subpart 4 for Purposes of Evaluating the Redesignation Request of the Area

With respect to the 1997 PM_{2.5} Implementation Rule, the D.C. Circuit Court's January 4, 2013 ruling rejected EPA's reasons for implementing the PM_{2.5} NAAQS solely in accordance with the provisions of subpart 1, and remanded that matter to EPA, so that it could address implementation of the PM_{2.5} NAAQS under subpart 4 of part D of the CAA, in addition to subpart 1. For the purposes of evaluating Pennsylvania's redesignation request for the Allentown Area, to the extent that implementation under subpart 4 would impose additional requirements for areas designated nonattainment, EPA believes that those requirements are not "applicable" for the purposes of section 107(d)(3)(E) of the CAA, and thus EPA is not required to consider subpart 4 requirements with respect to the redesignation of the Area. Under its longstanding interpretation of the CAA, EPA has interpreted section 107(d)(3)(E) to mean, as a threshold matter, that the part D provisions which are "applicable" and which must be approved in order for EPA to redesignate an area include only those which came due prior to a state's submittal of a complete redesignation request. *See* 1992 Calcagni Memorandum. *See also* "SIP Requirements for Areas Submitting Requests for Redesignation to Attainment of the Ozone and Carbon Monoxide (CO) NAAQS on or after November 15, 1992," Memorandum from Michael Shapiro, Acting Assistant Administrator, Air and Radiation, September 17, 1993 (Shapiro memorandum); Final Redesignation of Detroit-Ann Arbor, (60 FR 12459, 12465-66, March 7,

1995); Final Redesignation of St. Louis, Missouri, (68 FR 25418, 25424-27, May 12, 2003); *Sierra Club v. EPA*, 375 F.3d 537, 541 (7th Cir. 2004) (upholding EPA’s redesignation rulemaking applying this interpretation and expressly rejecting Sierra Club’s view that the meaning of “applicable” under the statute is “whatever should have been in the plan at the time of attainment rather than whatever actually was in the plan and already implemented or due at the time of attainment”).² In this case, at the time that Pennsylvania submitted its redesignation request for the Allentown Area for the 2006 24-hour PM_{2.5} NAAQS, the requirements under subpart 4 were not due.

EPA’s view that, for purposes of evaluating the redesignation of the Area, the subpart 4 requirements were not due at the time Pennsylvania submitted the redesignation request is in keeping with the EPA’s interpretation of subpart 2 requirements for subpart 1 ozone areas redesignated subsequent to the D.C. Circuit Court’s decision in *South Coast Air Quality Mgmt. Dist. v. EPA*, 472 F.3d 882 (D.C. Cir. 2006). In *South Coast*, the D.C. Circuit Court found that EPA was not permitted to implement the 1997 8-hour ozone standard solely under subpart 1, and held that EPA was required under the statute to implement the standard under the ozone-specific requirements of subpart 2 as well. Subsequent to the *South Coast* decision, in evaluating and acting upon redesignation requests for the 1997 8-hour ozone standard that were submitted to EPA for areas under subpart 1, EPA applied its longstanding interpretation of the CAA that “applicable requirements,” for purposes of evaluating a redesignation, are those that had been

² Applicable requirements of the CAA that come due subsequent to the area’s submittal of a complete redesignation request remain applicable until a redesignation is approved, but are not required as a prerequisite to redesignation. See section 175A(c) of the CAA.

due at the time the redesignation request was submitted. *See, e.g.*, Proposed Redesignation of Manitowoc County and Door County Nonattainment Areas (75 FR 22047, 22050, April 27, 2010). In those rulemaking actions, EPA therefore did not consider subpart 2 requirements to be “applicable” for the purposes of evaluating whether the area should be redesignated under section 107(d)(3)(E) of the CAA.

EPA’s interpretation derives from the provisions of section 107(d)(3) of the CAA. Section 107(d)(3)(E)(v) states that, for an area to be redesignated, a state must meet “all requirements ‘applicable’ to the area under section 110 and part D.” Section 107(d)(3)(E)(ii) provides that EPA must have fully approved the “applicable” SIP for the area seeking redesignation. These two sections read together support EPA’s interpretation of “applicable” as only those requirements that came due prior to submission of a complete redesignation request.

First, holding states to an ongoing obligation to adopt new CAA requirements that arose after the state submitted its redesignation request, in order to be redesignated, would make it problematic or impossible for EPA to act on redesignation requests in accordance with the 18-month deadline Congress set for EPA action in section 107(d)(3)(D). If “applicable requirements” were interpreted to be a continuing flow of requirements with no reasonable limitation, states, after submitting a redesignation request, would be forced continuously to make additional SIP submissions that in turn would require EPA to undertake further notice-and-comment rulemaking actions to act on those submissions. This would create a regime of unceasing

rulemaking that would delay action on the redesignation request beyond the 18-month timeframe provided by the CAA for this purpose.

Second, a fundamental premise for redesignating a nonattainment area to attainment is that the area has attained the relevant NAAQS due to emission reductions from existing controls. Thus, an area for which a redesignation request has been submitted would have already attained the NAAQS as a result of satisfying statutory requirements that came due prior to the submission of the request. Absent a showing that unadopted and unimplemented requirements are necessary for future maintenance, it is reasonable to view the requirements applicable for purposes of evaluating the redesignation request as including only those SIP requirements that have already come due. These are the requirements that led to attainment of the NAAQS. To require, for redesignation approval, that a state also satisfy additional SIP requirements coming due after the state submits its complete redesignation request, and while EPA is reviewing it, would compel the state to do more than is necessary to attain the NAAQS, without a showing that the additional requirements are necessary for maintenance.

In the context of this redesignation, the timing and nature of the D.C. Circuit Court's January 4, 2013 decision in *NRDC v. EPA*, and EPA's June 2, 2014 PM_{2.5} Subpart 4 Classification and Deadline Rule compound the consequences of imposing requirements that come due after the redesignation request is submitted. Pennsylvania submitted its redesignation request for the 2006 24-hour PM_{2.5} NAAQS on September 5, 2014 for the Allentown Area, which is prior to the

deadline by which the Area is required to meet the attainment plan and other requirements pursuant to subpart 4.

To require Pennsylvania's fully-completed and pending redesignation request for the 2006 24-hour PM_{2.5} NAAQS to comply now with requirements of subpart 4 that the D.C. Circuit Court announced only in January 2013 and for which the deadline to comply has not yet come would be to give retroactive effect to such requirements and provide Pennsylvania a unique and earlier deadline for compliance solely on the basis of submitting its redesignation request for the Area. The D.C. Circuit Court recognized the inequity of this type of retroactive impact in *Sierra Club Whitman*, 285 F.3d 63 (D.C. Cir. 2002),³ where it upheld the D.C. Circuit Court's ruling refusing to make retroactive EPA's determination that the Area did not meet its attainment deadline. In that case, petitioners urged the D.C. Circuit Court to make EPA's nonattainment determination effective as of the date that the statute required, rather than the later date on which EPA actually made the determination. The D.C. Circuit Court rejected this view, stating that applying it "would likely impose large costs on States, which would face fines and suits for not implementing air pollution prevention plans . . . even though they were not on notice at the time."

Id. at 68. Similarly, it would be unreasonable to penalize Pennsylvania by rejecting its

³ *Sierra Club v. Whitman* was discussed and distinguished in a recent D.C. Circuit Court decision that addressed retroactivity in a quite different context, where, unlike the situation here, EPA sought to give its regulations retroactive effect. *National Petrochemical and Refiners Ass'n v. EPA*, 630 F.3d 145, 163 (D.C. Cir. 2010), rehearing denied 643 F.3d 958 (D.C. Cir. 2011), *cert denied* 132 S. Ct. 571 (2011).

redesignation request for an area that is already attaining the 2006 24-hour PM_{2.5} NAAQS and that met all applicable requirements known to be in effect at the time of the request. For EPA now to reject the redesignation request solely because Pennsylvania did not expressly address subpart 4 requirements which have not yet come due and for which it had little to no notice, would inflict the same unfairness condemned by the D.C. Circuit Court in *Sierra Club v. Whitman*.

b. Subpart 4 Requirements and Pennsylvania's Redesignation Requests

Even if EPA were to take the view that the D.C. Circuit Court's January 4, 2013 decision requires that, in the context of pending redesignation for the 2006 24-hour PM_{2.5} NAAQS, subpart 4 requirements were due and in effect at the time Pennsylvania submitted its redesignation request, EPA proposes to determine that the Area still qualifies for redesignation to attainment for the 2006 24-hour PM_{2.5} NAAQS. As explained subsequently, EPA believes that the redesignation request for the Area, though not expressed in terms of subpart 4 requirements, substantively meets the requirements of that subpart for purposes of redesignating the Area to attainment for the 2006 24-hour PM_{2.5} NAAQS.

With respect to evaluating the relevant substantive requirements of subpart 4 for purposes of redesignating the Allentown Area, EPA notes that subpart 4 incorporates components of subpart 1 of part D, which contains general air quality planning requirements for areas designated as nonattainment. *See* section 172(c). Subpart 4 itself contains specific planning and scheduling

requirements for coarse particulate matter (PM₁₀)⁴ nonattainment areas, and under the D.C. Circuit Court’s January 4, 2013 decision in *NRDC v. EPA*, these same statutory requirements also apply for PM_{2.5} nonattainment areas. EPA has longstanding general guidance that interprets the 1990 amendments to the CAA, making recommendations to states for meeting the statutory requirements for SIPs for nonattainment areas. *See* the General Preamble. In the General Preamble, EPA discussed the relationship of subpart 1 and subpart 4 SIP requirements, and pointed out that subpart 1 requirements were to an extent “subsumed by, or integrally related to, the more specific PM₁₀ requirements” (57 FR 13538, April 16, 1992). The subpart 1 requirements include, among other things, provisions for attainment demonstrations, RACM, RFP, emissions inventories, and contingency measures.

For the purposes of this redesignation request, in order to identify any additional requirements which would apply under subpart 4, consistent with EPA’s June 2, 2014 PM_{2.5} Subpart 4 Classification and Deadline Rule, EPA is considering the Allentown Area to be a “moderate” PM_{2.5} nonattainment area. As EPA explained in its June 2, 2014 rule, section 188 of the CAA provides that all areas designated nonattainment areas under subpart 4 are initially classified by operation of law as “moderate” nonattainment areas, and remain moderate nonattainment areas unless and until EPA reclassifies the area as a “serious” nonattainment area. Accordingly, EPA believes that it is appropriate to limit the evaluation of the potential impact of subpart 4 requirements to those that would be applicable to moderate nonattainment areas. Sections 189(a) and (c) of subpart 4 apply to moderate nonattainment areas and include the following: (1) An approved permit program for construction of new and modified major stationary sources (section

⁴ PM₁₀ refers to particulates nominally 10 micrometers in diameter or smaller.

189(a)(1)(A)); (2) an attainment demonstration (section 189(a)(1)(B)); (3) provisions for RACM (section 189(a)(1)(C)); and (4) quantitative milestones demonstrating RFP toward attainment by the applicable attainment date (section 189(c)).

The permit requirements of subpart 4, as contained in section 189(a)(1)(A), refer to and apply the subpart 1 permit provisions requirements of sections 172 and 173 to PM₁₀, without adding to them. Consequently, EPA believes that section 189(a)(1)(A) does not itself impose for redesignation purposes any additional requirements for moderate areas beyond those contained in subpart 1.⁵ In any event, in the context of redesignation, EPA has long relied on the interpretation that a fully approved nonattainment NSR program is not considered an applicable requirement for redesignation, provided the area can maintain the standard with a prevention of significant deterioration (PSD) program after redesignation. A detailed rationale for this view is described in a memorandum from Mary Nichols, Assistant Administrator for Air and Radiation, dated October 14, 1994, entitled, “Part D NSR Requirements for Areas Requesting Redesignation to Attainment.” *See also* rulemakings for Detroit, Michigan (60 FR 12467-12468, March 7, 1995); Cleveland-Akron-Lorain, Ohio (61 FR 20458, 20469-20470, May 7, 1996); Louisville, Kentucky (66 FR 53665, October 23, 2001); and Grand Rapids, Michigan (61 FR 31834-31837, June 21, 1996).

⁵ The potential effect of section 189(e) on section 189(a)(1)(A) for purposes of evaluating this redesignation is discussed in this rulemaking action.

⁶ EPA refers to attainment demonstration, RFP, RACM, milestone requirements, and contingency measures.

With respect to the specific attainment planning requirements under subpart 4,⁶ when EPA evaluates a redesignation request under either subpart 1 or 4, any area that is attaining the PM_{2.5} NAAQS is viewed as having satisfied the attainment planning requirements for these subparts. For redesignations, EPA has for many years interpreted attainment-linked requirements as not applicable for areas attaining the standard. In the General Preamble, EPA stated that: “The requirements for RFP will not apply in evaluating a request for redesignation to attainment since, at a minimum, the air quality data for the area must show that the area has already attained. Showing that the State will make RFP towards attainment will, therefore, have no meaning at that point.”

The General Preamble also explained that: “[t]he section 172(c)(9) requirements are directed at ensuring RFP and attainment by the applicable date. These requirements no longer apply when an area has attained the standard and is eligible for redesignation. Furthermore, section 175A for maintenance plans . . . provides specific requirements for contingency measures that effectively supersede the requirements of section 172(c)(9) for these areas.” *Id.* EPA similarly stated in its 1992 Calcagni Memorandum that, “The requirements for reasonable further progress and other measures needed for attainment will not apply for redesignations because they only have meaning for areas not attaining the standard.”

It is evident that even if we were to consider the D.C. Circuit Court’s January 4, 2013 decision in *NRDC v. EPA* to mean that attainment-related requirements specific to subpart 4 should be imposed retroactively⁷ or prior to December 31, 2014 and thus, were due prior to Pennsylvania’s redesignation request, those requirements do not apply to an area that is attaining the 2006 24-hour PM_{2.5} NAAQS, for the purpose of evaluating a pending request to redesignate the area to attainment. EPA has consistently enunciated this interpretation of applicable requirements under section 107(d)(3)(E) since the General Preamble was published more than twenty years ago. Courts have recognized the scope of EPA’s authority to interpret “applicable requirements” in the redesignation context. *See Sierra Club v. EPA*, 375 F.3d 537 (7th Cir. 2004).

Moreover, even outside the context of redesignations, EPA has viewed the obligations to submit attainment-related SIP planning requirements of subpart 4 as inapplicable for areas that EPA determines are attaining the 2006 24-hour PM_{2.5} NAAQS. EPA’s prior “Clean Data Policy” rulemakings for the PM₁₀ NAAQS, also governed by the requirements of subpart 4, explain EPA’s reasoning. They describe the effects of a determination of attainment on the attainment-related SIP planning requirements of subpart 4. *See* “Determination of Attainment for Coso Junction Nonattainment Area,” (75 FR 27944, May 19, 2010). *See also* Coso Junction Proposed PM₁₀ Redesignation, (75 FR 36023, 36027, June 24, 2010); Proposed and Final Determinations of Attainment for San Joaquin Nonattainment Area (71 FR 40952, 40954–55, July 19, 2006; and

⁷ As explained earlier, EPA does not believe that the D.C. Circuit Court’s January 4, 2013 decision should be interpreted so as to impose these requirements on the states retroactively. *Sierra Club v. Whitman*, *supra*.

71 FR 63641, 63643–47, October 30, 2006). In short, EPA in this context has also long concluded that to require states to meet superfluous SIP planning requirements is not necessary and not required by the CAA, so long as those areas continue to attain the relevant NAAQS.

Elsewhere in this rule, EPA determined that the Area has attained and continues to attain the 2006 24-hour PM_{2.5} NAAQS. Under its longstanding interpretation, EPA is proposing to determine here that the Area meets the attainment-related plan requirements of subparts 1 and 4 for the 2006 24-hour PM_{2.5} NAAQS. Thus, EPA is proposing to conclude that the requirements to submit an attainment demonstration under section 189(a)(1)(B), a RACM determination under section 172(c)(1) and section 189(a)(1)(c), a RFP demonstration under 189(c)(1), and contingency measure requirements under section 172(c)(9) are satisfied for purposes of evaluating this redesignation request.

c. Subpart 4 and Control of PM_{2.5} Precursors

The D.C. Circuit Court in *NRDC v. EPA* remanded to EPA the two rules at issue in the case with instructions to EPA to re-promulgate them consistent with the requirements of subpart 4. EPA in this section addresses the D.C. Circuit Court's opinion with respect to PM_{2.5} precursors. While past implementation of subpart 4 for PM₁₀ has allowed for control of PM₁₀ precursors such as NO_x from major stationary, mobile, and area sources in order to attain the standard as expeditiously as practicable, section 189(e) of the CAA specifically provides that control requirements for major stationary sources of direct PM₁₀ shall also apply to PM₁₀ precursors

from those sources, except where EPA determines that major stationary sources of such precursors “do not contribute significantly to PM₁₀ levels which exceed the standard in the area.”

EPA’s 1997 PM_{2.5} Implementation Rule, remanded by the D.C. Circuit Court, contained rebuttable presumptions concerning certain PM_{2.5} precursors applicable to attainment plans and control measures related to those plans. Specifically, in 40 CFR 51.1002, EPA provided, among other things, that a state was “not required to address VOC [and NH₃] as . . . PM_{2.5} attainment plan precursor[s] and to evaluate sources of VOC [and NH₃] emissions in the State for control measures.” EPA intended these to be rebuttable presumptions. EPA established these presumptions at the time because of uncertainties regarding the emission inventories for these pollutants and the effectiveness of specific control measures in various regions of the country in reducing PM_{2.5} concentrations. EPA also left open the possibility for such regulation of VOC and NH₃ in specific areas where that was necessary.

The D.C. Circuit Court in its January 4, 2013 decision made reference to both section 189(e) and 40 CFR 51.1002, and stated that, “In light of our disposition, we need not address the petitioners’ challenge to the presumptions in [40 CFR 51.1002] that VOCs and NH₃ are not PM_{2.5} precursors, as subpart 4 expressly governs precursor presumptions.” *NRDC v. EPA*, at 27, n.10.

Elsewhere in the D.C. Circuit Court’s opinion, however, the D.C. Circuit Court observed: “NH₃ is a precursor to fine particulate matter, making it a precursor to both PM_{2.5} and PM₁₀. For a

PM₁₀ nonattainment area governed by subpart 4, a precursor is presumptively regulated. *See* 42 U.S.C. § 7513a(e) [section 189(e)].” *Id.* at 21, n.7.

For a number of reasons, the redesignation of the Allentown Area for the 2006 24-hour PM_{2.5} NAAQS is consistent with the D.C. Circuit Court’s decision on this aspect of subpart 4. While the D.C. Circuit Court, citing section 189(e), stated that “for a PM₁₀ area governed by subpart 4, a precursor is ‘presumptively’ regulated,” the D.C. Circuit Court expressly declined to decide the specific challenge to EPA’s 1997 PM_{2.5} Implementation Rule provisions regarding NH₃ and VOC as precursors. The D.C. Circuit Court had no occasion to reach whether and how it was substantively necessary to regulate any specific precursor in a particular PM_{2.5} nonattainment area, and did not address what might be necessary for purposes of acting upon a redesignation request.

However, even if EPA takes the view that the requirements of subpart 4 were deemed applicable at the time the state submitted the redesignation request, and disregards the 1997 PM_{2.5} Implementation Rule’s rebuttable presumptions regarding NH₃ and VOC as PM_{2.5} precursors, the regulatory consequence would be to consider the need for regulation of all precursors from any sources in the Area to demonstrate attainment and to apply the section 189(e) provisions to major stationary sources of precursors. In the case of the Allentown Area, EPA believes that doing so is consistent with proposing redesignation of the Area for the 2006 24-hour PM_{2.5} NAAQS. The Area has attained the 2006 24-hour PM_{2.5} NAAQS without any specific additional controls of NH₃ and VOC emissions from any sources in the Area.

Precursors in subpart 4 are specifically regulated under the provisions of section 189(e), which requires, with important exceptions, control requirements for major stationary sources of PM₁₀ precursors.⁸ Under subpart 1 and EPA's prior implementation rule, all major stationary sources of PM_{2.5} precursors were subject to regulation, with the exception of NH₃ and VOC. Thus EPA must address here whether additional controls of NH₃ and VOC from major stationary sources are required under section 189(e) of subpart 4 in order to redesignate the Area for the 2006 24-hour PM_{2.5} NAAQS. As explained subsequently, any additional controls of NH₃ and VOC are required in the context of this redesignation.

In the General Preamble, EPA discusses its approach to implementing section 189(e). *See* 57 FR 13538-13542. With regard to precursor regulation under section 189(e), the General Preamble explicitly stated that control of VOC under other CAA requirements may suffice to relieve a state from the need to adopt precursor controls under section 189(e). *See* 57 FR 13542. EPA in this rulemaking action, proposes to determine that the Pennsylvania SIP revisions have met the provisions of section 189(e) with respect to NH₃ and VOC as precursors. This proposed determination is based on EPA's findings that: (1) The Area contains no major stationary sources of NH₃, and (2) existing major stationary sources of VOC are adequately controlled under other provisions of the CAA regulating the ozone NAAQS.⁹ In the alternative, EPA proposes to determine that, under the express exception provisions of section 189(e), and in the

⁸ Under either subpart 1 or subpart 4, for purposes of demonstrating attainment as expeditiously as practicable, a state is required to evaluate all economically and technologically feasible control measures for direct PM emissions and precursor emissions, and adopt those measures that are deemed reasonably available.

⁹ The Area has reduced VOC emissions through the implementation of various control programs including VOC

context of the redesignation of the Area, which is attaining the 2006 24-hour PM_{2.5} NAAQS, at present NH₃ and VOC precursors from major stationary sources do not contribute significantly to levels exceeding the 2006 24-hour PM_{2.5} NAAQS in the Area. *See* 57 FR 13539-42.

EPA notes that its 1997 PM_{2.5} Implementation Rule provisions in 40 CFR 51.1002 were not directed at evaluation of PM_{2.5} precursors in the context of redesignation, but at SIP plans and control measures required to bring a nonattainment area into attainment of the 1997 annual PM_{2.5} NAAQS. By contrast, redesignation to attainment primarily requires the nonattainment area to have already attained due to permanent and enforceable emission reductions, and to demonstrate that controls in place can continue to maintain the standard. Thus, even if we regard the D.C. Circuit Court's January 4, 2013 decision as calling for "presumptive regulation" of NH₃ and VOC for PM_{2.5} under the attainment planning provisions of subpart 4, those provisions in and of themselves do not require additional controls of these precursors for an area that already qualifies for redesignation. Nor does EPA believe that requiring Pennsylvania to address precursors differently than it has already would result in a substantively different outcome.

Although, as EPA has emphasized, its consideration here of precursor requirements under subpart 4 is in the context of a redesignation to attainment, EPA's existing interpretation of subpart 4 requirements with respect to precursors in attainment plans for PM₁₀ contemplates that states may develop attainment plans that regulate only those precursors that are necessary for purposes of attainment in the area in question, i.e., states may determine that only certain

Reasonably Available Control Technology (RACT) regulations and various on-road and non-road motor vehicle control programs.

precursors need be regulated for attainment and control purposes.¹⁰ Courts have upheld this approach to the requirements of subpart 4 for PM₁₀.¹¹ EPA believes that application of this approach to PM_{2.5} precursors under subpart 4 is reasonable. Because the Area has already attained the 2006 24-hour PM_{2.5} NAAQS with its current approach to regulation of PM_{2.5} precursors, EPA believes that it is reasonable to conclude in the context of this redesignation that there is no need to revisit the attainment control strategy with respect to the treatment of precursors. Even if the D.C. Circuit Court's decision is construed to impose an obligation, in evaluating these redesignation requests, to consider additional precursors under subpart 4, it would not affect EPA's approval here of Pennsylvania's request for redesignation of the Area for the 2006 24-hour PM_{2.5} NAAQS. In the context of a redesignation, the Area has shown that it has attained the 2006 24-hour PM_{2.5} NAAQS. Moreover, Pennsylvania has shown and EPA has proposed to determine that attainment of the 2006 24-hour PM_{2.5} NAAQS in this Area is due to permanent and enforceable emissions reductions on all precursors necessary to provide for continued attainment of the NAAQS. *See* Section V.A.3. of this rulemaking. It follows logically that no further control of additional precursors is necessary. Accordingly, EPA does not view the January 4, 2013 decision of the D.C. Circuit Court as precluding redesignation of the Area to attainment for the 2006 24-hour PM_{2.5} NAAQS at this time.

In summary, even if, prior to the date of the redesignation request submittal, Pennsylvania was required to address precursors for the Area under subpart 4 rather than under subpart 1, as

¹⁰ *See, e.g.*, "Approval and Promulgation of Implementation Plans for California – San Joaquin Valley PM₁₀ Nonattainment Area; Serious Area Plan for Nonattainment of the 24-Hour and Annual PM₁₀ Standards," (69 FR 30006, May 26, 2004) (approving a PM₁₀ attainment plan that impose controls on direct PM₁₀ and NO_x emissions and did not impose controls on SO₂, VOC, or NH₃ emissions).

¹¹ *See, e.g., Assoc. of Irrigated Residents v. EPA et al.*, 423 F.3d 989 (9th Cir. 2005).

interpreted in EPA's remanded 1997 PM_{2.5} Implementation Rule, EPA would still conclude that the Area had met all applicable requirements for purposes of redesignation in accordance with section 107(d)(3)(E)(ii) and (v) of the CAA.

V. EPA's Analysis of Pennsylvania's SIP Submittal

EPA is proposing, several rulemaking actions for the Allentown nonattainment area: (1) To redesignate the Allentown Area to attainment for the 2006 24-hour PM_{2.5} NAAQS; (2) to approve into the Pennsylvania SIP the associated maintenance plan for the 2006 24-hour PM_{2.5} NAAQS; and (3) to approve the 2007 comprehensive emissions inventory into the Pennsylvania SIP to satisfy the requirements of section 172(c)(3) of the CAA for the Area, which is one of the criteria for redesignation. EPA's proposed approval of the redesignation request and maintenance plan for the 2006 24-hour PM_{2.5} NAAQS are based upon EPA's determination that the Area continues to attain the 2006 24-hour PM_{2.5} NAAQS, which EPA is proposing in this rulemaking action, and that all other redesignation criteria have been met for the Area. In addition, EPA is proposing to approve the 2017 and 2025 MVEBs for Lehigh and Northampton Counties, Pennsylvania for transportation conformity purposes. The following is a description of how the Pennsylvania September 5, 2014 submittal satisfies the requirements of the CAA including specifically section 107(d)(3)(E) for the 2006 24-hour PM_{2.5} NAAQS.

A. Redesignation Request

1. Attainment

As noted previously, in the final rulemaking action dated March 29, 2012 (77 FR 18922), EPA

determined that the Allentown Area had clean data for the 2006 24-hour PM_{2.5} NAAQS. EPA based this determination upon complete, quality assured, quality controlled, and certified ambient air monitoring data showing that the Area has monitored attainment of the 2006 24-hour PM_{2.5} NAAQS based on the 2008-2010 data in EPA's Air Quality System (AQS) database.

EPA has reviewed the ambient air quality PM_{2.5} monitoring data in the Area consistent with the requirements contained at 40 CFR part 50, and recorded in EPA's AQS database. To support the previous determination of attainment of the Area, EPA has also reviewed more recent data in its AQS database, including certified, quality-assured data for the period from 2008-2010, 2009-2011, 2010-2012 and 2011-2013. This data, shown in Table 1, shows that the Area continues to attain the 2006 24-hour PM_{2.5} NAAQS. In addition, as discussed subsequently with respect to the maintenance plan, PADEP has committed to continue monitoring ambient PM_{2.5} concentrations in accordance with 40 CFR part 58. Thus, EPA is proposing to determine that the Area continues to attain the 2006 24-hour PM_{2.5} NAAQS.

Table 1. Design Values for the Allentown Area for the 2006 24-hour PM_{2.5} NAAQS (µg/m³) for 2008-2010, 2009-2011, 2010-2012, and 2011-2013 (35 µg/m³)

Monitor ID #	2008-2010	2009-2011	2010-2012	2011-2013
Freemansburg 42-095-0025	32	33	32	32

2. The Area Has Met All Applicable Requirements under Section 110 and Subpart 1 of the CAA and Has a Fully Approved SIP under Section 110(k) of the CAA

In accordance with section 107(d)(3)(E)(v) of the CAA, the SIP revisions for the 2006 24-hour PM_{2.5} NAAQS for the Allentown Area must be fully approved under section 110(k) of the CAA and all the requirements applicable to the Area under section 110 of the CAA (general SIP requirements) and part D of Title I of the CAA (SIP requirements for nonattainment areas) must be met.

a. Section 110 General SIP Requirements

Section 110(a)(2) of Title I of the CAA delineates the general requirements for a SIP, which include enforceable emissions limitations and other control measures, means, or techniques, provisions for the establishment and operation of appropriate devices necessary to collect data on ambient air quality, and programs to enforce the limitations. The general SIP elements and requirements set forth in section 110(a)(2) of the CAA include, but are not limited to the following: (1) Submittal of a SIP that has been adopted by the state after reasonable public notice and hearing; (2) provisions for establishment and operation of appropriate procedures needed to monitor ambient air quality; (3) implementation of a minor source permit program; provisions for the implementation of part C requirements (PSD); (4) provisions for the implementation of part D requirements for NSR permit programs; (5) provisions for air pollution modeling; and (6) provisions for public and local agency participation in planning and emission control rule development.

Section 110(a)(2)(D) of the CAA requires that SIPs contain certain measures to prevent sources in a state from significantly contributing to air quality problems in another state. To implement

this provision, EPA has required certain states to establish programs to address the interstate transport of air pollutants in accordance with the NO_x SIP Call (63 FR 57356, October 27, 1998), amendments to the NO_x SIP Call (64 FR 26298, May 14, 1999 and 65 FR 11222, March 2, 2000), CAIR (70 FR 25162, May 12, 2005), and CSAPR. However, section 110(a)(2)(D) of the CAA requirements for a state are not linked with a particular nonattainment area's designation and classification in that state. EPA believes that the requirements linked with a particular nonattainment area's designation and classifications are the relevant measures to evaluate in reviewing a redesignation request. The transport SIP submittal requirements, where applicable, continue to apply to a state regardless of the designation of any one particular area in the state. Thus, EPA does not believe that these requirements are applicable requirements for purposes of redesignation.

In addition, EPA believes that the other section 110(a)(2) elements of the CAA not connected with nonattainment plan submissions and not linked with an area's attainment status are not applicable requirements for purposes of redesignation. The Area will still be subject to these requirements after it is redesignated. EPA concludes that section 110(a)(2) of the CAA and part D requirements which are linked with a particular area's designation and classification are the relevant measures to evaluate in reviewing a redesignation request, and that section 110(a)(2) elements of the CAA not linked in the area's nonattainment status are not applicable for purposes of redesignation. This approach is consistent with EPA's existing policy on applicability of conformity (i.e., for redesignations) and oxygenated fuels requirement. *See Reading, Pennsylvania, proposed and final rulemakings* (61 FR 53174, October 10, 1996), (62 FR 24826,

May 7, 1997); Cleveland-Akron-Lorain, Ohio final rulemaking (61 FR 20458, May 7, 1996); and Tampa, Florida final rulemaking (60 FR 62748, December 7, 1995). *See also* the discussion on this issue in the Cincinnati, Ohio redesignation (65 FR 37890, June 19, 2000) and in the Pittsburgh, Pennsylvania redesignation (66 FR 53099, October 19, 2001).

EPA has reviewed the Pennsylvania SIP and has concluded that it meets the general SIP requirements under section 110(a)(2) of the CAA to the extent they are applicable for purposes of redesignation. EPA has previously approved provisions of Pennsylvania's SIP addressing section 110(a)(2) requirements, including provisions addressing PM_{2.5}. *See* 77 FR 58955 (September 25, 2012). These requirements are, however, statewide requirements that are not linked to the PM_{2.5} nonattainment status of the Area. Therefore, EPA believes that these SIP elements are not applicable requirements for purposes of review of Pennsylvania's PM_{2.5} redesignation request.

b. Subpart 1 Requirements

Subpart 1 sets forth the basic nonattainment plan requirements applicable to PM_{2.5} nonattainment areas. Under section 172 of the CAA, states with nonattainment areas must submit plans providing for timely attainment and meet a variety of other requirements.

EPA's longstanding interpretation of the nonattainment planning requirements of section 172 is that once an area is attaining the NAAQS, those requirements are not "applicable" for purposes of section 107(d)(3)(E)(ii) and therefore need not be approved into the SIP before EPA can

redesignate the area. In the 1992 General Preamble for Implementation of Title I, EPA set forth its interpretation of applicable requirements for purposes of evaluating redesignation requests when an area is attaining a standard. *See* 57 FR 13498, 13564 (April 16, 1992). EPA noted that the requirements for RFP and other measures designed to provide for attainment do not apply in evaluating redesignation requests because those nonattainment planning requirements “have no meaning” for an area that has already attained the standard. *Id.* This interpretation was also set forth in the 1992 Calcagni Memorandum. EPA’s understanding of section 172 also forms the basis of its Clean Data Policy, which was articulated with regard to PM_{2.5} in 40 CFR 51.1004(c), and suspends a state’s obligation to submit most of the attainment planning requirements that would otherwise apply, including an attainment demonstration and planning SIPs to provide for RFP, RACM, and contingency measures under section 172(c)(9).¹² Courts have upheld EPA’s interpretation of section 172(c)(1)’s “reasonably available” control measures and control technology as meaning only those controls that advance attainment, which precludes the need to require additional measures where an area is already attaining. *NRDC v. EPA*, 571 F.3d 1245, 1252 (D.C. Cir. 2009); *Sierra Club v. EPA*, 294 F.3d 155, 162 (D.C. Cir. 2002); *Sierra Club v. EPA*, 314 F.3d 735, 744 (5th Cir. 2002).

Therefore, because attainment has been reached in the Allentown Area, no additional measures are needed to provide for attainment, and section 172(c)(1) requirements for an attainment demonstration and RACM are no longer considered to be applicable for purposes of redesignation as long as the Area continues to attain the standard until redesignation. Section

¹² This regulation was promulgated as part of the 1997 PM_{2.5} NAAQS implementation rule that was subsequently challenged and remanded in *NRDC v. EPA*, 706 F.3d 428 (D.C. Cir. 2013), as discussed in Section IV.B of this rule. However, the Clean Data Policy portion of the implementation rule was not at issue in that case.

172(c)(2)'s requirement that nonattainment plans contain provisions promoting reasonable further progress toward attainment is also not relevant for purposes of redesignation because EPA has determined that the Allentown Area has monitored attainment of the 2006 24-hour PM_{2.5} NAAQS. In addition, because the Allentown Area has attained the 2006 24-hour PM_{2.5} NAAQS and is no longer subject to a RFP requirement, the requirement to submit the section 172(c)(9) contingency measures is not applicable for purposes of redesignation. Section 172(c)(6) requires the SIP to contain control measures necessary to provide for attainment of the NAAQS. Because attainment has been reached, no additional measures are needed to provide for attainment.

The requirement under section 172(c)(3) was not suspended by EPA's clean data determination for the 2006 24-hour PM_{2.5} NAAQS and is the only remaining requirement under section 172 of the CAA to be considered for purposes of redesignation of the Area. Section 172(c)(3) of the CAA requires submission and approval of a comprehensive, accurate and current inventory of actual emissions. As part of Pennsylvania's redesignation request submittal, Pennsylvania submitted a 2007 base year emissions inventory for the Area for the 2006 24-hour PM_{2.5} NAAQS which includes emissions estimates that cover the general source categories of point sources, nonroad mobile sources, area sources and on-road mobile sources. The pollutants that comprise the inventory are NO_x, VOC, PM_{2.5}, NH₃, and SO₂.

In this rulemaking action, EPA is proposing to approve the 2007 base year emissions inventory in accordance with section 172(c)(3) of the CAA for the Area. Final approval of the 2007 base year emissions inventory will satisfy the emissions inventory requirement under section

172(c)(3) of the CAA. For more information on the evaluation and EPA’s analysis of the 2007 base year emissions inventory, *see* Appendices B-1 and C-1 of Pennsylvania’s submittals and the emissions inventory technical support document (TSD) dated December 17, 2014, which is available in the docket for this proposed rulemaking action. The summary of the 2007 base year emissions inventory in tons per year (tpy) are shown in Table 2.

Table 2. Allentown Area 2007 Emissions by Source Sector

Sector	PM_{2.5}	PM₁₀	SO₂	NO_x	VOC	NH₃
Point	3,565	4,641	54,071	13,663	1,151	31
Area	2,150	6,415	2,552	1,987	8,266	582
Nonroad	536	647	118	15,857	6,936	245
Onroad	256	272	158	3,177	2,685	3
Total	6,507	11,975	56,900	34,685	19,038	861

Section 172(c)(4) of the CAA requires the identification and quantification of allowable emissions for major new and modified stationary sources in an area, and section 172(c)(5) of the CAA requires source permits for the construction and operation of new and modified major stationary sources anywhere in the nonattainment area. EPA has determined that, since the PSD requirements will apply after redesignation, areas being redesignated need not comply with the requirement that a nonattainment NSR program be approved prior to redesignation, provided that the area demonstrates maintenance of the NAAQS without part D NSR. A more detailed rationale for this view is described in a memorandum from Mary Nichols, Assistant Administrator for Air and Radiation, dated October 14, 1994 entitled, “Part D NSR Requirements for Areas Requesting Redesignation to Attainment.” Nevertheless, Pennsylvania currently has an approved NSR program, codified in the Commonwealth’s regulations at 25 Pa. Code 127.201 *et seq.* *See* 77 FR 41276 (July 13, 2012) (approving NSR program into the SIP).

See also 49 FR 33127 (August 21, 1984) (approving Pennsylvania's PSD program). However, Pennsylvania's PSD program for the 2006 24-hour PM_{2.5} NAAQS will become effective in the Allentown Area upon redesignation to attainment.

Section 172(c)(7) of the CAA requires the SIP to meet the applicable provisions of section 110(a)(2) of the CAA. As noted previously, Pennsylvania SIP revisions meet the requirements of section 110(a)(2) of the CAA that are applicable for purposes of redesignation.

Section 175A of the CAA requires a state seeking redesignation to attainment to submit a SIP revision to provide for the maintenance of the NAAQS in the area "for at least 10 years after the redesignation." In conjunction with its request to redesignate the Area to attainment status, Pennsylvania submitted a SIP revision to provide for maintenance of the 2006 24-hour PM_{2.5} NAAQS in the Area for at least 10 years after redesignation, through 2025. Pennsylvania is requesting that EPA approve this SIP revision as meeting the requirement of section 175A of the CAA. Once approved, the maintenance plan for the Area will ensure that the SIP for Pennsylvania meets the requirements of the CAA regarding maintenance of the 2006 24-hour PM_{2.5} NAAQS for the Area. EPA's analysis of the maintenance plan is provided in Section V.B. of today's proposed rulemaking action.

Section 176(c) of the CAA requires states to establish criteria and procedures to ensure that Federally supported or funded projects conform to the air quality planning goals in the applicable SIP. The requirement to determine conformity applies to transportation plans, programs, and

projects developed, funded or approved under Title 23 of the United States Code (U.S.C.) and the Federal Transit Act (transportation conformity) as well as to all other Federally supported or funded projects (general conformity). State transportation conformity SIP revisions must be consistent with Federal conformity regulations relating to consultation, enforcement and enforceability which EPA promulgated pursuant to its authority under the CAA. EPA approved Pennsylvania's transportation conformity SIP requirements on April 29, 2009 (74 FR 19541).

Thus, for purposes of redesignating the Area to attainment for the 2006 24-hour PM_{2.5} NAAQS, EPA determines that upon final approval of the 2007 comprehensive emissions inventory as proposed in this rulemaking action, the Area will meet all applicable SIP requirements under part D of Title I of the CAA for purposes of redesignating the Area to attainment for the 2006 24-hour PM_{2.5} NAAQS.

c. Pennsylvania has a Fully Approved Applicable SIP Under Section 110(k) of the CAA

Upon final approval of the 2007 comprehensive emissions inventory proposed in this rulemaking action, EPA will have fully SIP-approved, all applicable requirements of the Pennsylvania SIP revisions for the Area for purposes of redesignation to attainment for the 2006 24-hour PM_{2.5} NAAQS in accordance with section 110(k) of the CAA. As noted in this rulemaking action, EPA is proposing to approve the Area's 2007 emissions inventory (submitted as part of the maintenance plan) as meeting the requirement of section 172(c)(3) of the CAA for the 2006 24-hour PM_{2.5} NAAQS. Therefore, upon approval of the 2007 emissions inventory, Pennsylvania will have satisfied all applicable requirements under part D of Title I of the CAA for the Area.

3. Permanent and Enforceable Reductions in Emissions

For redesignating a nonattainment area to attainment, section 107(d)(3)(E)(iii) of the CAA requires EPA to determine that the air quality improvement in the area is due to permanent and enforceable reductions in emissions resulting from implementation of the SIP and applicable Federal air pollution control regulations and other permanent and enforceable reductions.

In making this demonstration, Pennsylvania has calculated the change in emissions between 2005, which is the year used to designate the Area as nonattainment, and 2007, which is one of the years the Area monitored attainment, as shown in Table 3. The reduction in emissions (negative values) in tpy, and the corresponding improvement in air quality from 2005 to 2007 in the Area can be attributed to a number of regulatory control measures that have been implemented in the Area and contributing areas in recent years. For more information on EPA's analysis of the 2005 and 2007 emissions inventories, see EPA's emissions inventory TSD dated December 17, 2014, available in the docket for this proposed rulemaking action.

Table 3. Emission Reductions from 2005 Base Year to 2007 Attainment Year in the Allentown Area

Change from 2005 to 2007	PM_{2.5}	SO₂	NO_x	VOC	NH₃
Point & Area Sources	-1,023	-6,848	-5,194	-2,660	-507
Highway Vehicle Sources	340	-136	5,204	-536	-261
Nonroad Sources	-17	-151	-66	-243	0
Total	-699	-7,136	-57	-3,439	-768

a. Federal Measures Implemented

Reductions in PM_{2.5} precursor emissions have occurred statewide and in upwind states as a result

of Federal emission control measures, with additional emission reductions expected to occur in the future.

NOx SIP Call - On October 27, 1998 (63 FR 57356), EPA issued the NOx SIP Call requiring the District of Columbia and 22 states to reduce emissions of NOx, a precursor to ozone pollution.¹³ Affected states were required to comply with Phase I of the SIP Call beginning in 2004 and Phase II beginning in 2007. Emission reductions resulting from regulations developed in response to the NOx SIP Call are permanent and enforceable. By imposing an emissions cap regionally, the NOx SIP Call reduced NOx emissions from large EGUs and large non-EGUs such as industrial boilers, internal combustion engines, and cement kilns. In response to the NOx SIP Call, Pennsylvania adopted its NOx Budget Trading Program regulations for EGUs and large industrial boilers, with emission reductions starting in May 2003. Pennsylvania's NOx Budget Trading Program regulation was approved into the Pennsylvania SIP on August 21, 2001 (66 FR 43795). To meet other requirements of the NOx SIP Call, Pennsylvania adopted NOx control regulations for cement plants and internal combustion engines, with emission reductions starting in May 2005. These regulations were approved into the Pennsylvania SIP on September 29, 2006 (71 FR 57428).

CAIR - As previously noted, CAIR (70 FR 25162, May 12, 2005) created regional cap-and-trade programs to reduce SO₂ and NO_x emissions in 28 eastern states, including Pennsylvania. EPA approved the Commonwealth's CAIR regulation, codified in 25 Pa. Code Chapter 145,

¹³Although the NOx SIP Call was issued in order to address ozone pollution, reductions of NOx as a result of that program have also impacted PM_{2.5} pollution, for which NOx is also a precursor emission.

Subchapter D, into the Pennsylvania SIP on December 10, 2009 (74 FR 65446). In 2009, the CAIR ozone season NO_x trading program superseded the NO_x Budget Trading Program, although the emission reduction obligations of the NO_x SIP Call were not rescinded. *See* 40 CFR 51.121(r) and 51.123(aa). EPA promulgated CSAPR to replace CAIR as an emission trading program for EGUs. As discussed previously, pursuant to the D.C. Circuit Court's October 23, 2014 Order, the stay of CSAPR has been lifted and implementation of CSAPR began in January 2015. EPA expects that the implementation of CSAPR will preserve the reductions achieved by CAIR and result in additional SO₂ and NO_x emission reductions throughout the maintenance period.

Tier 2 Emission Standards for Vehicles and Gasoline Sulfur Standards

These emission control requirements result in lower NO_x emissions from new cars and light duty trucks, including sport utility vehicles. The Federal rules were phased in between 2004 and 2009. EPA estimated that, after phasing in the new requirements, the following vehicle NO_x emission reductions will have occurred nationwide: Passenger cars (light duty vehicles) (77 percent); light duty trucks, minivans, and sports utility vehicles (86 percent); and larger sports utility vehicles, vans, and heavier trucks (69 to 95 percent). Some of the emissions reductions resulting from new vehicle standards occurred during the 2008-2010 attainment period; however, additional reductions will continue to occur throughout the maintenance period as new vehicles replace older vehicles. EPA expects fleet wide average emissions to decline by similar percentages as new vehicles replace older vehicles.

Heavy-Duty Diesel Engine Rule

EPA issued the Heavy-Duty Diesel Engine Rule in July 2000. This rule included standards limiting the sulfur content of diesel fuel, which went into effect in 2004. A second phase took effect in 2007 which reduced PM_{2.5} emissions from heavy-duty highway engines and further reduced the highway diesel fuel sulfur content to 15 ppm. Standards for gasoline engines were phased in starting in 2008. The total program is estimated to achieve a 90 percent reduction in direct PM_{2.5} emissions and a 95 percent reduction in NOx emissions for new engines using low sulfur diesel fuel.

Nonroad Diesel Rule

On June 29, 2004 (69 FR 38958), EPA promulgated the Nonroad Diesel Rule for large nonroad diesel engines, such as those used in construction, agriculture, and mining, to be phased in between 2008 and 2014. The rule phased in requirements for reducing the sulfur content of diesel used in nonroad diesel engines. The reduction in sulfur content prevents damage to the more advanced emission control systems needed to meet the engine standards. It will also reduce fine particulate emissions from diesel engines. The combined engine standards and the sulfur in fuel reductions will reduce NOx and PM emissions from large nonroad engines by over 90 percent, compared to current nonroad engines using higher sulfur content diesel.

Nonroad Large Spark-Ignition Engine and Recreational Engine Standards

In November 2002, EPA promulgated emission standards for groups of previously unregulated nonroad engines. These engines include large spark-ignition engines such as those used in

forklifts and airport ground-service equipment; recreational vehicles using spark-ignition engines such as off-highway motorcycles, all-terrain vehicles, and snowmobiles; and recreational marine diesel engines. Emission standards from large spark-ignition engines were implemented in two tiers, with Tier 1 starting in 2004 and Tier 2 in 2007. Recreational vehicle emission standards are being phased in from 2006 through 2012. Marine Diesel engine standards were phased in from 2006 through 2009. With full implementation of all of the nonroad spark-ignition engine and recreational engine standards, an overall 80 percent reduction in NO_x is expected by 2020. Some of these emission reductions occurred by the 2002-2007 attainment period and additional emission reductions will occur during the maintenance period as the fleet turns over.

Federal Standards for Hazardous Air Pollutants

As required by the CAA, EPA developed Maximum Available Control Technology (MACT) Standards to regulate emissions of hazardous air pollutants from a published list of industrial sources referred to as “source categories.” The MACT standards have been adopted and incorporated by reference in Section 6.6 of Pennsylvania’s Air Pollution Control Act and implementing regulations in 25 Pa. Code §127.35 and are also included in Federally enforceable permits issued by PADEP for affected sources. The Industrial/Commercial/Institutional (ICI) Boiler MACT standards (69 FR 55217, September 13, 2004, and 76 FR 15554, February 21, 2011) are estimated to reduce emissions of PM, SO₂, and VOCs from major source boilers and process heaters nationwide. Also, the Reciprocating Internal Combustion Engines (RICE) MACT will reduce NO_x and PM emissions from engines located at facilities such as pipeline compressor stations, chemical and manufacturing plants, and power plants.

b. State Measures

Heavy-Duty Diesel Emissions Control Program

In 2002, Pennsylvania adopted the Heavy-Duty Diesel Emissions Control Program for model years starting in May 2004. The program incorporates California standards by reference and required model year 2005 and beyond heavy-duty diesel highway engines to be certified to the California standards, which were more stringent than the Federal standards for model years 2005 and 2006. After model year 2006, Pennsylvania required implementation of the Federal standards that applied to model years 2007 and beyond, discussed in the Federal measures section of this proposed rulemaking action. This program reduced emissions of NO_x statewide.

Vehicle Emission Inspection/Maintenance (I/M) program

Pennsylvania's Vehicle Emission I/M program was expanded into the Allentown Area in early 2004, and applies to model year 1975 and newer gasoline-powered vehicles that are 9,000 pounds and under. The program, approved into the Pennsylvania SIP on October 6, 2005 (70 FR 58313), consists of annual on-board diagnostics and gas cap test for model year 1996 vehicles and newer, and an annual visual inspection of pollution control devices and gas cap test for model year 1995 vehicles and older. This program reduces emissions of NO_x from affected vehicles.

Consumer Products Regulation

Pennsylvania regulation “Chapter 130, Subchapter B. Consumer Products” established, effective January 1, 2005, VOC emission limits for numerous categories of consumer product, and applies statewide to any person who sells, supplies, offers for sale, or manufactures such consumer products on or after January 1, 2005 for use in Pennsylvania. It was approved into the Pennsylvania SIP on December 8, 2004 (69 FR 70895). Amendments to the Consumer Products regulations was approved into the Pennsylvania SIP on October 18, 2010 (75 FR 63717).

Adhesives, Sealants, Primers and Solvents Regulation

Pennsylvania adopted a regulation in 2010 to control VOC emissions from adhesives, sealants, primers and solvents. This regulation was approved into the Pennsylvania SIP on September 26, 2012 (77 FR 59090).

Based on the information summarized above, Pennsylvania has adequately demonstrated that the improvement in air quality in the Allentown Area are due to permanent and enforceable emissions reductions. The reductions result from Federal and State requirements and regulation of precursors within Pennsylvania that affect the Allentown Area.

B. Maintenance Plan

On September 5, 2014, PADEP submitted a maintenance plan for the Allentown Area for the 2006 24-hour PM_{2.5} NAAQS as required by section 175A of the CAA. EPA’s analysis for proposing approval of the maintenance plan is provided in this section.

1. Attainment Emissions Inventory

Section 172(c)(3) requires states to submit a comprehensive, accurate, current inventory of actual emissions from all sources in the nonattainment area. For a maintenance plan, states are required to submit an inventory to identify the level of emissions in the area which is sufficient to attain the NAAQS, referred to as the attainment inventory (or the maintenance plan base year inventory), and which should be based on actual emissions. PADEP submitted an attainment inventory for 2007, which is one of the years in the period during which the Allentown Area monitored attainment of the 2006 24-hour PM_{2.5} NAAQS. The inventory for 2007 is comprised of NO_x, PM_{2.5}, SO₂, VOC, and NH₃ emissions from point sources, nonpoint sources, onroad mobile sources, and nonroad mobile sources.

The 2007 point source inventory contained emissions for EGU and non-EGU sources in Lehigh and Northampton Counties that were directly reported by the facilities. Since the reported emissions did not include condensable emissions, the EGU inventory was augmented to account for condensable emissions by application of emission factors developed by the Mid-Atlantic Regional Air Management Association (MARAMA) in 2008. The nonpoint source emissions inventory for 2007 was developed using 2007 specific activity data along with EPA emission factors and the most recent available emission calculation methodologies. PADEP used the 2008 National Emissions Inventory (NEI) data to fill in any missing categories in the 2007 inventory. For the 2007 nonroad mobile sources, PADEP generated emissions using EPA's National Mobile Inventory Model (NMIM) 2008 model. Since marine, air and rail/locomotive (MAR) emissions are not part of the NONROAD model, they were calculated separately outside of the

NONROAD model. The 2007 onroad mobile source inventory was developed using EPA's highway mobile source emissions model MOVES2010. PADEP used local activity to replace default inputs in the model where appropriate.

EPA has reviewed the documentation provided by PADEP and found the 2007 emissions inventory acceptable for meeting the requirements under section 172(c)(3). For more information on the emissions inventory submitted by PADEP for the Area and EPA's analysis of the emissions inventory, see Appendices B-1 and C-1 of the Pennsylvania submittal and the emissions inventory TSD dated December 17, 2014, which is available in the docket for this proposed rulemaking action.

2. Maintenance Demonstration

Section 175A requires a state seeking redesignation to attainment to submit a SIP revision to provide for the maintenance of the NAAQS in the area "for at least 10 years after the redesignation." EPA has interpreted this as a showing of maintenance "for a period of ten years following redesignation." Where the emissions inventory method of showing maintenance is used, its purpose is to show that emissions during the maintenance period will not increase over the attainment year inventory. *See* 1992 Calcagni Memorandum, pages 9-10.

For a demonstration of maintenance, emissions inventories are required to be projected to future dates to assess the influence of future growth and controls; however, the maintenance demonstration need not be based on modeling. *See Wall v. EPA, supra; Sierra Club v. EPA,*

supra. See also 66 FR 53099-53100; 68 FR 25430-32. PADEP uses projection inventories to show that the Area will remain in attainment and developed projection inventories for an interim year of 2017 and a maintenance plan end year of 2025 to show that future emissions of NO_x, SO₂, VOC, NH₃, and PM_{2.5} will remain at or below the attainment year 2007 emissions levels throughout the Area through the year 2025.

The Federal and State measures described in Section V.A.3. of this proposed rulemaking action demonstrate that the reductions in emissions from point, area, and mobile sources in the Area has occurred and will continue to occur through 2025. In addition, the following State and Federal regulations and programs ensure the continuing decline of SO₂, NO_x, PM_{2.5}, and VOC emissions in the Area during the maintenance period and beyond:

Non-EGUs previously covered under the NO_x SIP Call

Pennsylvania established NO_x emission limits for the large industrial boilers that were previously subject to the NO_x SIP Call, but were not subject to CAIR. For these units, Pennsylvania established an allowable ozone season NO_x limit based on the unit's previous ozone season's heat input. A combined NO_x ozone season emissions cap of 3,418 tons applies for all of these units.

CSAPR (August 8, 2011, 76 FR 48208)

EPA promulgated CSAPR to replace CAIR as an emission trading program for EGUs. As discussed previously, pursuant to the D.C. Circuit Court's October 23, 2014 Order, the stay of

CSAPR has been lifted and EPA began implementation of CSAPR in January 2015. EPA expects that the implementation of CSAPR will preserve the reductions achieved by CAIR and result in additional SO₂ and NO_x emission reductions throughout the maintenance period.

Regulation of Cement Kilns

On July 19, 2011 (76 FR 52558), EPA approved amendments to 25 Pa. Code Chapter 145 Subchapter C to further reduce NO_x emissions from cement kilns. The amendments established NO_x emission rate limits for long wet kilns, long dry kilns, and preheater and precalciner kilns that are lower by 35 to 63 percent from the previous limit of 6 pounds of NO_x per ton of clinker that applied to all kilns. The amendments were effective on April 15, 2011.

Stationary Source Regulations

Pennsylvania regulation 25 Pa. Code Chapter 130, Subchapter D for Adhesives, Sealers, Primers, and Solvents was approved into the Pennsylvania SIP on September 26, 2012 (77 FR 59090). The regulation established VOC content limits for various categories of adhesives, sealants, primers, and solvent, and became applicable on January 1, 2012.

Amendments to Pennsylvania regulation 25 Pa. Code Chapter 130, Subchapter B established, effective January 1, 2009, new or more stringent VOC standards for consumer products. The amendments were approved into the Pennsylvania SIP on October 18, 2010 (75 FR 63717).

Pennsylvania's Clean Vehicle Program

The Pennsylvania Clean Vehicles Program (formerly, New Motor Vehicle Control Program) incorporates by reference the California Low Emission Vehicle program (CA LEVII), although it allowed automakers to comply with the NLEV program as an alternative to this program until Model Year (MY) 2006. The Clean Vehicles Program, codified in 25 Pa. Code Chapter 126, Subchapter D, was modified to require CA LEVII to apply to MY 2008 and beyond, and was approved into the Pennsylvania SIP on January 24, 2012 (77 FR 3386). The Clean Vehicles Program incorporates by reference the emission control standards of CA LEVII, which, among other requirements, reduces emissions of NO_x by requiring that passenger car emission standards and fleet average emission standards also apply to light duty vehicles. Model year 2008 and newer passenger cars and light duty trucks are required to be certified for emissions by the California Air Resource Board (CARB), in order to be sold, leased, offered for sale or lease, imported, delivered, purchased, rented, acquired, received, titled or registered in Pennsylvania. In addition, manufacturers are required to demonstrate that the California fleet average standard is met based on the number of new light-duty vehicles delivered for sale in the Commonwealth. The Commonwealth's submittal for the January 24, 2012 rulemaking projected that, by 2025, the program will achieve 318 tons more NO_x reductions than Tier II for the counties in the Allentown Area.

Two Pennsylvania regulations – its Diesel-Powered Motor Vehicle Idling Act (August 1, 2011, 76 FR 45705) and its Outdoor Wood-Fired Boiler regulation (September 20, 2011, 76 FR 58114) - were not included in the projection inventories, but may also assist in maintaining the NAAQS.

Also, the Tier 3 Motor Vehicle Emission and Fuel Standards (79 FR 23414, April 29, 2014) establishes more stringent vehicle emissions standards and will reduce the sulfur content of gasoline beginning in 2017. The fuel standard will achieve NO_x reductions by further increasing the effectiveness of vehicle emission controls for both existing and new vehicles.

The projection inventories for the 2017 and 2025 point, area, and nonroad sources were taken from regional inventories coordinated by MARAMA for the states in the Mid-Atlantic/Northeast Visibility Union and Virginia (MANE-VU+VA), which includes Pennsylvania. Detailed discussion of how 2017 and 2025 projections were developed are contained in Appendix C-2 and C-3, respectively, of Pennsylvania's submittal. EPA has reviewed the documentation provided by PADEP and found the methodologies acceptable.

EPA has determined that the 2017 and 2025 projected emissions inventories provided by PADEP are approvable. For more information on EPA's analysis of the emissions inventory, *see* EPA's TSD dated December 17, 2014, which is available in the docket for this proposed rulemaking action. Table 5 provides a summary of the inventories for the 2007 attainment year, as compared to the projected inventories for the 2017 interim year and the 2025 maintenance plan end year for the Area in tpy.

Table 5. Comparison of 2007 Attainment Year and 2017 and 2025 Projected PM_{2.5} Emissions in the Allentown Area

	PM _{2.5}	NO _x	SO ₂	NH ₃	VOC
2007 (attainment)	6,507	34,685	56,900	861	19,038
2017 (interim)	5,875	20,471	27,731	809	14,627
2017 (projected decrease)	682	14,214	29,169	52	4,411
2025 (maintenance)	5,745	17,281	26,850	807	13,133

2025 (projected decrease)	762	17,467	30,050	54	5,905
---------------------------	-----	--------	--------	----	-------

As shown in Table 5, the projected levels of PM_{2.5}, NO_x, SO₂, NH₃, and VOC are well under the 2007 attainment year levels for each of these pollutants. Pennsylvania has adequately demonstrated that the Area will continue to maintain the 2006 24-hour PM_{2.5} NAAQS during the 10 year maintenance period.

While Pennsylvania's maintenance plan submitted for the Allentown Area for CAA section 175A did not specifically include or mention the SO₂ emission limits EPA imposed on the Portland Generating Station located in Northampton County, Pennsylvania (Portland Facility) in 2011, EPA notes that those limits will likely support the Allentown Area's ability to maintain the 2006 PM_{2.5} NAAQS going forward because SO₂ is a precursor to PM_{2.5}. Thus, reduced SO₂ emissions from the Portland Facility should also reduce subsequent PM_{2.5} formation. Pursuant to section 126 of the CAA, on November 7, 2011, EPA promulgated SO₂ emission limitations and reporting requirements for the coal-fired boilers (Units 1 and 2) at the Portland Facility after EPA made a finding that the coal-fired units at the Portland Facility significantly contribute to nonattainment for the 1-hour 2010 SO₂ NAAQS in New Jersey. *See* 76 FR 69052 (relating to final response to petition from New Jersey regarding SO₂ emissions from the Portland Facility). The federally enforceable SO₂ emission limitations and reporting requirements for the coal-fired boilers (Units 1 and 2) at the Portland Facility are established in 40 CFR 52.2039.

The SO₂ emission limits in 40 CFR 52.2039 represent an 81 percent reduction of SO₂ emissions from the Portland Facility's previously permitted levels. In 2010, Portland emitted

approximately 23,000 tons of SO₂. The limits and requirements in 40 CFR 52.2039 are “applicable requirements” as defined in 25 Pa. Code § 121.1 (which is included in the federally enforceable Pennsylvania SIP) because they have been promulgated or approved by the EPA under the CAA or the regulations adopted under the CAA through rulemaking. As applicable requirements, they must therefore be included in a Title V operating permit for the Portland Facility pursuant to 25 Pa. Code § 127.502.

3. Monitoring Network

Pennsylvania’s maintenance plan includes a commitment to continue to operate its EPA-approved monitoring network, as necessary to demonstrate ongoing compliance with the NAAQS. Pennsylvania currently operates a PM_{2.5} monitor at the Freemansburg monitoring site in Northampton County. In its September 5, 2014 submittal, Pennsylvania stated that it will consult with EPA prior to making any necessary changes to the network and will continue to quality assure the monitoring data in accordance with the requirements of 40 CFR part 58.

4. Verification of Continued Attainment

To provide for tracking of the emission levels in the Area, PADEP requires major point sources to submit air emissions information annually and prepares a new periodic inventory for all PM_{2.5} precursors every three years in accordance with EPA’s Air Emissions Reporting Requirements (AERR). Emissions information will be compared to the attainment year inventory (2007) to assure continued attainment with the 2006 24-hour PM_{2.5} NAAQS and will be used to assess emissions trends, as necessary. Also, as noted in the previous subsection, PADEP will continue

to operate its monitoring system in accordance with 40 CFR 58 and remains obligated to quality-assure monitoring data and enter all data into the AQS in accordance with Federal requirements. PADEP will use this data, supplemented with additional data, as necessary, to assure continuing attainment in the Area.

5. Contingency Measures

The contingency plan provisions are designed to promptly correct any violation of the 2006 24-hour PM_{2.5} NAAQS that occurs in the Area after redesignation. Section 175A of the CAA requires that a maintenance plan include such contingency measures as EPA deems necessary to ensure that a state will promptly correct a violation of the NAAQS that occurs after redesignation. The maintenance plan should identify the events that would “trigger” the adoption and implementation of a contingency measure(s), the contingency measure(s) that would be adopted and implemented, and the schedule indicating the time frame by which the state would adopt and implement the measure(s).

Pennsylvania’s maintenance plan describes the procedures for the adoption and implementation of contingency measures to reduce emissions should a violation occur. Pennsylvania’s contingency measures include a first level response and a second level response. A first level response is triggered when the annual mean PM_{2.5} concentration exceeds 35.0 µg/m³ in a single calendar year within the Area, or if the periodic emissions inventory for the Area exceeds the attainment year inventory by more than ten percent. The first level response will consist of a study to determine if the emissions trends show increasing concentrations of PM_{2.5}, and whether

this trend is likely to continue. If it is determined through the study that action is necessary to reverse a trend of emissions increases, Pennsylvania will, as expeditiously as possible, implement necessary and appropriate control measures to reverse the trend.

A second level response will be prompted if the two-year average of the annual mean concentration exceeds $35.0 \mu\text{g}/\text{m}^3$ within the Area. This would trigger an evaluation of the conditions causing the exceedence, whether additional emission control measures should be implemented to prevent a violation of the standard, and analysis of potential measures that could be implemented to prevent a violation. Pennsylvania would then begin its adoption process to implement the measures as expeditiously as practicable.

Pennsylvania's candidate contingency measures include the following: (1) A regulation based on the Ozone Transport Commission (OTC) Model Rule to update requirements for consumer products; (2) a regulation based on the Control Techniques Guidelines (CTG) for industrial cleaning solvents; (3) voluntary diesel projects such as diesel retrofit for public or private local onroad or offroad fleets, idling reduction technology for Class 2 yard locomotives, and idling reduction technologies or strategies for truck stops, warehouses, and other freight-handling facilities; (4) promotion of accelerated turnover of lawn and garden equipment, focusing on commercial equipment; and (5) promotion of alternative fuels for fleets, home heating and agricultural use. Pennsylvania's rulemaking process and schedule for adoption and implementation of any necessary contingency measure is shown in the SIP submittals as being 18 months from PADEP's approval to initiate rulemaking. For all of the reasons discussed in

this section, EPA is proposing to approve Pennsylvania's 2006 24-hour PM_{2.5} maintenance plan for the Allentown Area as meeting the requirements of section 175A of the CAA.

C. Transportation Conformity

Section 176(c) of the CAA requires Federal actions in nonattainment and maintenance areas to “conform to” the goals of SIPs. This means that such actions will not cause or contribute to violations of a NAAQS, worsen the severity of an existing violation, or delay timely attainment of any NAAQS or any interim milestone. Actions involving Federal Highway Administration (FHWA) or Federal Transit Administration (FTA) funding or approval are subject to the transportation conformity rule (40 CFR Part 93, subpart A). Under this rule, metropolitan planning organizations (MPOs) in nonattainment and maintenance areas coordinate with state air quality and transportation agencies, EPA, and the FHWA and FTA to demonstrate that their long range transportation plans and transportation improvement programs (TIP) conform to applicable SIPs. This is typically determined by showing that estimated emissions from existing and planned highway and transit systems are less than or equal to the MVEBs contained in the SIP. On September 5, 2014, Pennsylvania submitted SIP revisions that contain the 2017 and 2025 PM_{2.5} and NO_x onroad mobile source budgets for Lehigh and Northampton Counties, Pennsylvania. Pennsylvania did not provide emission budgets for SO₂, VOC, and NH₃ because it concluded, consistent with the presumptions regarding these precursors in the Transportation Conformity Rule at 40 CFR 93.102(b)(2)(v), which predated and were not disturbed by the litigation on the 1997 PM_{2.5} Implementation Rule, that emissions of these precursors from motor vehicles are not significant contributors to the Area's PM_{2.5} air quality problem. EPA issued

conformity regulations to implement the 1997 annual PM_{2.5} NAAQS in July 2004 and May 2005 (69 FR 40004, July 1, 2004 and 70 FR 24280, May 6, 2005). That decision does not affect EPA's proposed approval of the MVEBs for the Area. The MVEBs are presented in Table 6.

Table 6. MVEBs for Lehigh and Northampton Counties in Pennsylvania for the 2006 24-hour NAAQS, in tpy

Year	PM_{2.5}	NO_x
2017	297	8,081
2025	234	5,303

EPA's substantive criteria for determining adequacy of MVEBs are set out in 40 CFR 93.118(e)(4). Additionally, to approve the MVEBs, EPA must complete a thorough review of the SIP, in this case the PM_{2.5} maintenance plan, and conclude that with the projected level of motor vehicle and all other emissions, the SIPs will achieve its overall purpose, in this case providing for maintenance of the 2006 24-hour PM_{2.5} NAAQS. EPA's process for determining adequacy of a MVEB consists of three basic steps: (1) Providing public notification of a SIP submission; (2) providing the public the opportunity to comment on the MVEB during a public comment period; and (3) EPA taking action on the MVEB.

In this proposed rulemaking action, EPA is also initiating the process for determining whether or not the MVEBs are adequate for transportation conformity purposes. The publication of this rule starts a 30-day public comment period on the adequacy of the submitted MVEBs. This comment period is concurrent with the comment period on this proposed action and comments should be submitted to the docket for this rulemaking.

EPA may choose to make its determination on the adequacy of the budgets either in the final rulemaking on this maintenance plan and redesignation request or by informing Pennsylvania of the determination in writing, publishing a notice in the Federal Register and posting a notice on EPA's adequacy web page

(<http://www.epa.gov/otaq/stateresources/transconf/adequacy.htm>).¹⁴

EPA has reviewed the MVEBs and finds them consistent with the maintenance plan and that the budgets meet the criteria for adequacy and approval in 40 CFR 93, Subpart A. Therefore, EPA is proposing to approve the 2017 and 2025 PM_{2.5} and NO_x MVEBs for Lehigh and Northampton Counties for transportation conformity purposes. Additional information pertaining to the review of the MVEBs can be found in the TSD, "Adequacy Findings for the Motor Vehicle Emissions Budgets in the Maintenance Plan for the Allentown 2006 Fine Particulate National Ambient Air Quality Standard Nonattainment Area," dated December 1, 2014, available on line at www.regulations.gov, Docket ID No. EPA-R03-OAR-2014-0789.

VI. Proposed Actions

EPA is proposing to approve Pennsylvania's request to redesignate the Allentown Area from nonattainment to attainment for the 2006 24-hour PM_{2.5} NAAQS. EPA has evaluated Pennsylvania's redesignation request and determined that the Area meets the redesignation criteria set forth in section 107(d)(3)(E) of the CAA. The monitoring data demonstrates that the

¹⁴ For additional information on the adequacy process, please refer to 40 CFR 93.118(f) and the discussion of the adequacy process in the preamble to the 2004 final transportation conformity rule. See 69 FR 40039-40043.

Area had attained the 2006 24-hour PM_{2.5} NAAQS as determined by EPA in a prior rulemaking, and, for the reasons discussed herein, that it will continue to attain the NAAQS. Final approval of this redesignation request would change the designation of the Allentown Area from nonattainment to attainment for the 2006 24-hour PM_{2.5} NAAQS. EPA is also proposing to approve the associated maintenance plan for the Area as a revision to the Pennsylvania SIP because it meets the requirements of section 175A of the CAA as described previously in this proposed rulemaking. In addition, EPA is proposing to approve the 2007 base year emissions inventory as meeting the requirement of section 172(a)(3) of the CAA. Furthermore, EPA is proposing to approve the 2017 and 2025 PM_{2.5} and NO_x MVEBs for Lehigh and Northampton Counties for transportation conformity purposes. EPA is soliciting public comments on the issues discussed in this document. These comments will be considered before taking final action.

VII. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely proposes to approve state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed action:

- is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);

- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this rule proposing to approve Pennsylvania's redesignation request, maintenance plan, 2007 base year emissions inventory, and MVEBs for transportation conformity purposes for the Allentown Area for the 2006 24-hour PM_{2.5} NAAQS, does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the state, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

List of Subjects

40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Nitrogen oxides, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds

40 CFR Part 81

Air pollution control, National parks, Wilderness areas

Authority: 42 U.S.C. 7401 et seq.

Dated: January 21, 2015.

William C. Early, Acting

Regional Administrator,
Region III.

[FR Doc. 2015-02207 Filed 02/03/2015 at 8:45 am; Publication Date: 02/04/2015]